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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,359	09/21/2001	Robert Moule	7376-2	2524

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EXAMINER

COURSON, TANIA C

ART UNIT PAPER NUMBER

2859

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,359

Applicant(s)

MOULE ET AL.

Examiner

Tania C. Courson

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 26 June 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-23 and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Colley et al. (WO 92/08113).

Colley et al. disclose in Figures 1-2, a marking element, comprising:

- a) a first material (Fig. 1, first material 8 and page 8, claim 1) separated from a second absorbent material (Fig. 1, second absorbent material 6 and page 8, claim 1) by a heat disruptable barrier layer (Fig. 1, barrier layer 7 and page 8, claim 1), the first and second materials being such that when the barrier layer is punctured and the predetermined temperature is exceeded the first material flows in the second material to produce a detectable change (Fig. 1 and page 8, claim 1), the first material flows into the second material to produce a detectable change (Fig. 1 and page 8, claim 1), wherein the heat disruptable barrier layer is comprised of a heat disruptable material associated with an element (Fig. 1, ink layer 3 and page 8, claim 1);

Art Unit: 2859

- b) a lower layer (Fig. 1, carrier sheet 2) which together with the heat disruptable layer forms a reservoir for the first material (Fig. 1) and an absorbent layer provided on the opposite side of the barrier layer to said reservoir (Fig. 1);
- c) wherein the absorbent layer is overlaid by a transparent film (Fig. 1, clear layer 9);
- d) wherein the heat disruptable material is a plastics film (Fig. 1, barrier layer/heat shrink film 7);
- e) wherein the element is provided on the heat disruptable material (Fig. 1), and;
- f) wherein the element is provided by a conductive ink (Fig. 1, ink layer 3 and page 8, claim 1).

Regarding claim 17: With respect to the intended use of the apparatus, e.g. for indicating: It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 17: It has been held that the recitation that an element is “capable of” performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. Therefore, one skilled in the art would use an alternate type of heating energy so that the element is heated in order to suit the needs of the user of the device.

Art Unit: 2859

With respect to claim 23: regarding the term “conductive”, the examiner utilizes the following broadest definition: “the ability or power to transmit” (the American Heritage Dictionary, 1992).

Regarding claims 27-28: Where a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with the evidence establishing an unobvious difference between the two. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colley et al. (2nd interpretation) in view of Germain et al. (US 5,464,968).

Colley et al. disclose a marking element, comprising:

- a) a first material (Fig. 1, first material 8 and page 8, claim 1) capable of flowing above a predetermined temperature (Fig. 1 and page 8 claim 1) separated from a second absorbent material (Fig. 1, second absorbent material 6 and page 8, claim 1) by a heat disruptable barrier layer (Fig. 1, barrier layer 7 and page 8,

- claim 1), the first and second materials being such that when the barrier layer is punctured and the predetermined temperature is exceeded the first material flows in the second material to produce a detectable change (Fig. 1 and page 8, claim 1), the first material flows into the second material to produce a detectable change (Fig. 1 and page 8, claim 1), wherein the heat disruptable barrier layer is comprised of a heat disruptable material associated with an element (Fig. 1, ink layer 3 and page 8, claim 1) capable of being heated by energy to effect disruption of said material (Fig. 1 and page 5, lines 29-33);
- b) a lower layer (Fig. 1, carrier sheet 2) which together with the heat disruptable layer forms a reservoir for the first material (Fig. 1) and an absorbent layer provided on the opposite side of the barrier layer to said reservoir (Fig. 1);
 - c) wherein the absorbent layer is overlaid by a transparent film (Fig. 1, clear layer 9);
 - d) wherein the heat disruptable material is a plastics film (Fig. 1, barrier layer/heat shrink film 7);
 - e) wherein the element is provided on the heat disruptable material (Fig. 1) and;
 - f) wherein the element is provided by a conductive ink (Fig. 1, ink layer 3 and page 8, claim 1).

Colley et al. do not disclose an element capable of being inductively heated by electromagnetic energy, the conductive element/ink is a metallic ink or a graphic loaded ink, wherein the element is provided by metal, carbon or an electrically conductive plastics or

Art Unit: 2859

polymeric material, wherein the element is of metal in the form of a film, sheet or foil and a method comprising subjecting the marking element to electromagnetic energy capable of inductively heating said inductive heatable element to effect disruption of the barrier layer.

With respect to claim 17: With respect to the intended use of the apparatus, e.g. for indicating: It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

With respect to claim 23: regarding the term “conductive”, the examiner utilizes the following broadest definition: “the ability or power to transmit” (the American Heritage Dictionary, 1992).

With respect to an element capable of being inductively heated by electromagnetic energy, the conductive element/ink is a metallic ink or a graphic loaded ink, wherein the element is provided by metal, carbon or an electrically conductive plastics or polymeric material, wherein the element is of metal in the form of a film, sheet or foil and a method comprising subjecting the marking element to electromagnetic energy capable of inductively heating said inductive heatable element to effect disruption of the barrier layer, Germain et al. teaches a detection apparatus and method using microwave ovens that consists of an element (Fig. 2, ink layer 12) capable of being inductively heated by electromagnetic energy (column 3, lines 1-17), the

Art Unit: 2859

conductive element/ink is a metallic ink (column 6, lines 55-56) or a graphic loaded ink, wherein the element is provided by metal (column 6, lines 55-56), carbon or an electrically conductive plastics or polymeric material, wherein the element is of metal in the form of a film (column 4, line 18), sheet or foil and a method comprising subjecting the marking element to electromagnetic energy capable of inductively heating said inductive heatable element to effect disruption of the barrier layer (column 3, lines 1-17. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the marking element of Colley et al., so as to replace Colley et al.'s ink and associated heating method with the conductive metallic ink and associated inductive heating method, as taught by Germain et al., because both are well known alternate types of inks and associated heating methods, which will perform the same function, if one is replaced with the other, of disrupting a material when heated.

Regarding claims 27-28: Where a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with the evidence establishing an unobvious difference between the two. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

Response to Arguments

5. Applicant's arguments filed June 26, 2003 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose a marking element device and method thereof and alternate forms of heating elements;

Christy et al. (US 5,786,578)

Keefer (US 4,786,773)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (703) 305-3031.

The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached on (703) 308-3875. The fax number for this Organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



DIEGO F.F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
GROUP ART UNIT 2859